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Remarks/Arguments

Claims 1 and 6-12 are currently amended. Claim 13 is cancelled without prejudice. Claims 14 and 15 are newly added. The claims have been amended to clarify the present invention and no new matter is added by this amendment. The following discussion addresses the objections and rejections set forth in the Office Action.

Rejection of Claims 7-12 Under 35 U.S.C. §112, second paragraph

The Examiner rejected claims 7-12 for lack of antecedent basis. The Applicant has amended claims 7-12 to recite claim 5 instead of claim 4. In addition, the Applicant has amended claim 8 to recite "selected from the group consisting of" as suggested by the Examiner. The Applicant respectfully requests that the rejection under 35 U.S.C. §112, second paragraph be withdrawn.

Rejection of Claims 1-6, and 8-13 Under Doctrine of Obviousness-Type Double Patenting

The Examiner has also provisionally rejected the following claims under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of the following copending applications:

| Rejected Claims of the Present Application | Copending Application No. | Claims from the Copending Application being rejected over |
|--|---------------------------|---|
| 1-2, 4-6, 10, 12 and 13 | 10/946,339 ('339) | 1-7, 12 and 13 |
| 1-2, 4-6, 8-10 and 13 | 10/840,949 ('949) | 1-5 and 8 |
| 1-6, 8-10 and 12 | 10/758,409 ('409) | 1-4 |
| 1-6 and 8-13 | 10/436,622 ('622) | 1-11, 15, 17-21 and 23-28 |
| 1-6 and 8-13 | 11/008,581 ('581) | 1-22 and 37-40 |

The Examiner further rejected the following claims under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of the following US Patents:

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| Rejected Claims of the Present Application | US Patent No. | Claims from the US Patent being rejected over |
|--|------------------|---|
| 13 | 6,878,691 ('691) | 1-8 |
| 13 | 6,764,998 ('998) | 1-21 |
| 1-6, 8-11 and 13 | 6,274,715 ('715) | 1-7 and 10 |
| 1-6, 8-11 and 13 | 6,645,941 ('941) | 1-7 and 10 |
| 13 | 6,645,941 ('941) | 1-6 and 13 |
| 13 | 6,355,620 ('620) | 1-6 and 13 |
| 13 | 6,054,435 ('435) | 1-11 |
| 1-6, 8-10, 12 and 13 | 6,075,133 ('133) | 1-7 |
| 1-6 and 8-13 | 6,046,171 ('171) | 1, 5-8 and 9-19 |
| 1-6, 8-10, 12 and 13 | 5,922,683 ('683) | 1-25 |

The Applicant is submitting herewith terminal disclaimers over the following applications and patents: '339, '949, '409, '622, '581, '691, '998, and '941. The Applicant submits that the rejection in view of patents '715, '620, '435, '133, '171, and '683 (hereinafter "the cited patents") is rendered moot by the presently amended claims. The Applicant has amended claim 1 to recite that the bridging component is characterized by its ability to form π -allyl metal complex in the presence of a catalyst which is supported in the specification on page 22, line 24-25. The cited patents use "diamine" as the bridging component as noted by the Examiner. The "diamine" bridging components cited in the prior art do not have the ability to form π -allyl metal complex in the presence of a catalyst and therefore do not anticipate the presently claimed invention. In addition, the newly added claim 14 requires a palladium catalyst which is not discussed or disclosed or suggested by the cited patents. The newly added claim 15 requires that the bifunctional reagent is characterized by at least two leaving groups and in the presence of catalyst. The cited patents do not suggest or disclose the bridging component and the use of catalyst as in the presently claimed invention. In view of the amended claims and above discussion, Applicant respectfully requests that all rejections under doctrine of obviousness-type double patenting be withdrawn.

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Rejection of Claims 1-3, 5-6, 8-11 and 13 Under 35 U.S.C. §102(b)

The Examiner rejected claims 1-3, 5-6, 10-11 and 13 as being anticipated by Or US Patent No. 5,780,605 ('605) stating that Or et al teach a process for making a bridged macrocyclic compound comprising the reaction of a macrocyclic compound with bromofluoromethane. The Examiner further rejected claims 1-3, 5-6, 8-11 as being anticipated by Or et al (WO 99/21864) stating that Or et al teach a process for making a bridged macrocyclic compound comprising the reaction of macrocyclic compound with the bridging components $\text{H}_2\text{N}-(\text{CH}_2)_m\text{-A-B-D-X}$ and $(\text{CH}_2)_2\text{-C=CH}_2$ to yield a bridging component. Applicant respectfully disagrees. While it is true that bromofluoromethane is a bifunctional bridging component, the '605 patent does not disclose that the bridging component is characterized by its ability to form π -allyl metal complex or the use of a metal catalyst and therefore it does not anticipate the present claims. As for WO 99/21864, the publication discloses the use of more than one bridging component to complete the bridge. WO 99/21864 does not disclose or suggest the use of a single bridging component to complete the bridge as is presently claimed. The Examiner additionally rejected claim 13 as being anticipated. The Applicant has cancelled claim 13 without prejudice and therefore rendered the rejection moot. Applicant respectfully requests that all rejections under 35 U.S.C. §102(b) be withdrawn.

Rejection of Claims 1-12 Under 35 U.S.C. §103(a)

The Examiner rejected claims 1-12 as being unpatentable over Or et al (WO 99/21864) stating that it would have been obvious to one ordinary skill in the art at the time the invention was made to use the process of Or to make a bridged macrocyclic product as instantly claimed. Applicant respectfully disagrees. As mentioned above, Or et al discloses the use of more than one bridging component to complete the bridge while the present claims are directed to "a bridging component" meaning only one component to complete the bridge. Furthermore, Or does not disclose or suggest a bridging component characterized by its ability to form π -allyl metal complex or the use of catalyst as in the present claims. The process of forming a bridged macrocyclic product disclosed by Or is very different from the process of the presently claimed invention. The process suggested by Or requires two alkylation steps of two bridging components to

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the macrocycle, followed by ring closing metathesis which results in at least a 3-step procedure. The presently claimed invention can be carried out in a one pot procedure with a single bridging component to form the bridge macrocyclic product. A one pot procedure with the two bridging components disclosed by Or would mostly likely results in a complex mixture. The process of the present invention results in bridged macrocyclic compounds that differ from the compounds formed by the Or et al process. Applicant respectfully requests that the rejection of obviousness be withdrawn.

Conclusion

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 251-3509.

Respectfully submitted,

ELMORE PATENT LAW GROUP, P.C.

By 

Carolyn S. Elmore

Registration No: 37,567

Telephone: (978) 251-3509

Facsimile: (978) 251-3973

N. Chelmsford, MA 01863

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